

Patent Claims

1. A light source comprising a large number of light-emitting diodes, **characterized** in that the light-emitting diodes (7) are mounted alongside one another on one face of a flexible printed circuit (4), and are electrically conductively connected to conductor tracks (9) on the flexible printed circuit (4).
2. The light source as claimed in claim 1, **characterized** in that the flexible printed circuit (4) is mounted with that face which is opposite the light-emitting diodes (7) on a stable mounting board (2), for heat dissipation.
3. The light source as claimed in claim 2, **characterized** in that the mounting board (2) is composed of thermally conductive material.
4. The light source as claimed in claim 3, **characterized** in that the mounting board (2) is connected to a heat sink or is in the form of a heat sink.
5. The light source as claimed in claim 2, **characterized** in that the flexible printed circuit board (4) is connected to the mounting board (2) by means of a thermally conductive adhesive or a thermally conductive adhesion layer.
6. The light source as claimed in claim 1, **characterized** in that the conductor tracks (9) end in contact pads (10) on the flexible printed circuit (4), with the lines (8) which originate from the light-emitting diodes (7) making electrically conductive contact with the contact pads (10).

7. The light source as claimed in claim 6, characterized in that one or more of the light-emitting diodes (7) is or are integrated in a semiconductor chip, and the semiconductor chip has a corresponding number of contact pads, which are electrically conductively connected to the corresponding contact pads (10) on the flexible printed circuit (4).
8. The light source as claimed in claim 7, characterized in that the electrically conductive connections are produced via wires, which are connected to the contact pads on the flexible printed circuit and the semiconductor chip by soldering, bonding or adhesive bonding.
9. The light source as claimed in one of the preceding claims, characterized in that the light-emitting diodes (7) are arranged in an encapsulation compound (11).
10. The light source as claimed in claim 9, characterized in that the encapsulation compound (11) extends as far as the light outlet surface of the light-emitting diodes (7).